

REMARKS

Applicant has carefully reviewed the Final Office Action of July 27, 2007 and the Advisory Action of November 5, 2007 in which claims 1, 2, 6-8, 10, 12, 17 and 18 are pending and have been rejected. Claim 10 has been amended, claims 26-33 have been added, and claims 1, 2 and 6-8 have been cancelled with this paper. Support for the amendments may be found, for example, at page 5, lines 2-7; page 8, lines 7-10; page 9, lines 7-8; page 9, lines 20-23; and page 10, lines 1-23. No new matter has been added. Favorable consideration of the above amendments and following remarks is respectfully requested.

Claims 1-2, 6-8, 10, 12 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schoenholtz, U.S. Patent No. 6,203,534, in view of Cohen, U.S. Patent No. 5,330,521. Applicant respectfully traverses the rejection. Claims 1-2, 6-8 and 17-18 have been cancelled and the limitations of claim 18 have been incorporated into claim 10.

Regarding the rejection of claim 10, the claim has been amended to indicate that it is directed to an intravascular catheter. As asserted in a previous response, Applicant respectfully submits that the Cohen reference is not an analogous reference, either to Schoenholtz or to the present application: it is in a different field from Applicant's application and it would not have logically commended itself to the attention of one of skill in the art. Cohen discloses a permanently implantable electrical lead having relatively low electrical resistance. Cohen is directed to the problem in the field of electrical leads of reducing electrical resistance per unit length while withstanding the high repetitive loads of a beating heart (column 3, lines 46-52). To this end, Cohen teaches the electrical lead includes a pre-compressed helically coiled core wire in which adjacent coils of the wire are in contact, thus allowing electrical current to flow axially from coil to coil to reduce the pathlength of the electrical circuit through the electrical lead. See Cohen at column 6, lines 6-17. The electrical lead of Cohen is designed to be permanently implanted in a body cavity to deliver electricity from a pace maker or other device to an electrode in a beating heart without suffering fatigue failure. The electrical lead is intended to remain in a patient's body for an extended period of time (e.g., decades). See Cohen at column 2, lines 1-5.

Dissimilarly, claim 10 is directed to an intravascular catheter. Intravascular catheters are designed for a single use during a medical procedure and then discarded upon completion of the

medical procedure. One of skill in the art of intravascular catheters would not be inclined to look to the teachings of an electrical lead designed to endure decades of continuous use, as an intravascular catheter is intended only for temporary, one-time use during a medical procedure and then discarded. Thus, one of skill in the art, designing an intravascular catheter as currently claimed, would not be expected to be aware of the state of the art in electrical leads nor would electrical lead technology commend itself to an invention considering problems in the intravascular catheter arts. Furthermore, the Cohen reference has a separate classification than that of Schoenholtz or to the present application. Applicant therefore respectfully submits that the Cohen reference is not an analogous reference. Therefore, a *prima facie* case of obviousness has not been established.

Furthermore, claim 10 has been amended to recite the limitations provided in claim 18. Namely, claim 10 has been amended to recite that each of the wires of the at least two continuous wires of the braid layer has a proximal diameter of about 1.5 millimeters and a distal diameter of about 1.0 millimeters.

Schoenholtz is silent as to the size of the braided mesh. Furthermore, Cohen discloses that the wire core 42 tapers from about 0.2 millimeters to about 0.1 millimeters at the distal end. Cohen, at column 9, lines 24-26. Cohen teaches that tapering the wire core from 0.2 millimeters to 0.1 millimeters is necessary to impart sufficient resistance to withstand stresses imposed in the lead by the beating heart. See Cohen at column 8, lines 55-60. Thus, Cohen teaches that dimensions as small as 0.2 millimeters may not be sufficient to withstand stresses imposed in the electrical lead, suggesting to one of skill in the art that dimensions greater than 0.2 millimeters would surely be unacceptable. Namely, Cohen states that “[t]he sections of the lead in which the wire core has the large cross-sectional area...have limited flexibility making them less tolerant of repetitive, cyclical stresses.” Cohen, at column 8, lines 7-13. The dimensions recited in claim 10 are magnitudes larger than even the largest suggested dimension taught in Cohen. In view of the teachings of Cohen, one of skill in the art would not be inclined to make the wire core of Cohen larger in diameter, as this would hinder the electrical lead’s ability to be used as intended in order to endure cyclic stresses. Therefore, it is asserted that the general conditions of claim 10 are not disclosed in the prior art.

For at least the reasons stated above, claim 10 is believed patentable over the cited prior art as a *prima facie* case of obviousness has not been established for claim 10. Claims 12 and 26,

which depend from claim 10 and add additional limitations, are also believed patentable over the cited prior art. Withdrawal of the rejection is respectfully requested.

Newly added claims 27-33 are also believed patentable over the cited prior art. Claim 27, *inter alia*, recites that each of the continuous wires of the reinforcing braid layer includes a step-wise transition from the first cross-sectional area of each of the continuous wires to the second cross-sectional area of each of the continuous wires. Neither Schoenholtz nor Cohen teaches at least this limitation of claim 27.

Claim 29 is directed to an intravascular catheter including an elongate shaft having a proximal portion having a first flexibility and a distal portion having a second flexibility greater than the first flexibility. The elongate shaft includes a reinforcing braid layer formed of at least two continuous wires interwoven together, wherein each of the continuous wires extends through the proximal portion of the elongate shaft and the distal portion of the elongate shaft. Each of the continuous wires has a first cross-sectional area in the proximal braid section, and each of the continuous wires has a second cross-sectional area in the distal braid section which is less than the first cross-sectional area. The second cross-sectional area of each of the continuous wires in the distal braid section is about one-third less than the first cross-sectional area of each of the continuous wires in the proximal braid section. The cited prior art does not teach all the limitations of claim 29. Favorable consideration of these claims is respectfully requested.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By his Attorney,



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